

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): ~~Process~~ A process for desulfurization of a hydrocarbon-containing fraction ~~that comprises~~ process comprising at least one treatment stage of said fraction with an oxidizing agent in the presence of a catalyst of said oxidation, in which said catalyst is in bulk form and comprises an active phase consisting essentially of at least one metallic oxide of chemical formula M_xO_y , ~~whereby~~ wherein M is an element that is selected from the group that consists of the elements of groups IV-B, V-B or VI-B of the periodic table, ~~and said catalyst is in bulk form and essentially consists of the active phase.~~

Claim 2 (Currently Amended): ~~Process~~ A process for desulfurization according to claim 1, in which said hydrocarbon-containing fraction is a petroleum fraction whose boiling points are between 150 and 500°C.

Claim 3 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which said hydrocarbon-containing fraction comprises a fraction by weight of sulfur-containing compounds of between 5 ppm and 5%.

Claim 4 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which the temperature of said oxidation reaction is between 40°C and 300°C.

Claim 5 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which the temperature of said oxidation reaction is greater than or equal to 100°C.

Claim 6 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which the pressure of said oxidation reaction is between 0.1 and 5 MPa.

Claim 7 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which element M is selected from the group that consists of vanadium, chromium, zirconium, molybdenum, tungsten, and titanium, ~~by themselves or in a combination~~ and combination thereof.

Claim 8 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which the active phase of said catalyst ~~comprises a molybdenum oxide~~ consists essentially of MoO₃, V₂O₅ or ZrO₂ or mixtures thereof.

Claim 9 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which said catalyst is used in the form of powder, balls or extrudates.

Claim 10 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of the preceding claims~~ claim 1, in which said oxidizing agent is selected from the group that consists of peroxides, hydroperoxides, organic peracids, ozone, oxygen, nitrogen oxides and metallic oxidizing agents, by themselves or in a combination.

Claim 11 (Currently Amended): ~~Process~~ A process for desulfurization of a sulfur-containing hydrocarbon-containing fraction that comprises at least the following stages:

- a) an oxidation of at least a portion of the sulfur-containing compounds ~~that are~~ contained in said hydrocarbon-containing fraction in the presence of at least one oxidizing agent and a catalyst according to ~~one of claims 1 to 10~~ claim 1,
- b) a separation of the oxidized sulfur-containing compounds of the products obtained from stage a) by extraction, distillation or adsorption.

Claim 12 (Currently Amended): ~~Process~~ A process for desulfurization according to claim 11, in which stage b) ~~is~~ comprises an adsorption ~~that is step~~ carried out in at least one adsorbent column, ~~whereby~~ wherein said adsorbent is selected from ~~among~~ the group consisting of amorphous oxides, ~~such as the~~ amorphous aluminas, amorphous silicas ~~or~~ amorphous silica-aluminas, ~~or from among the~~ crystallized oxides, ~~such as the~~ zeolites, clays or a mixture of at least two of the ~~elements~~ adsorbents of said group.

Claim 13 (Currently Amended): ~~Process~~ A process for desulfurization according to ~~any of claims 11 or 12~~ claim 11 also comprising a separation stage of said catalyst between oxidation stage a) and separation stage b).

Claim 14 (New): A process according to claim 1, wherein the hydrocarbon fraction is kerosene or gas oil.

Claim 15 (New): A process for desulfurization according to claim 10, in which the active phase of said catalyst consists essentially of MoO_3 , V_2O_5 or ZrO_2 or mixtures thereof.

Claim 16 (New): A process according to claim 15, wherein the oxidizing agent is hydrogen peroxide tertiary butyl hydroperoxide, or cumene.

Claim 17 (New): A process for desulfurization according to claim 2, in which the temperature of said oxidation reaction is greater than or equal to 100°C .

Claim 18 (New): A process for desulfurization according to claim 8, in which the temperature of said oxidation reaction is greater than or equal to 100°C .

Claim 19 (New): A process for desulfurization according to claim 16, in which the temperature of said oxidation reaction is greater than or equal to 100°C .

Claim 20 (New): A process for desulfurization according to claim 11, in which the temperature of said oxidation reaction is greater than or equal to 100°C.

Claim 21 (New): A process according to claim 1, wherein the bulk form is in the form of balls, extrudates or powder.

Claim 22 (New): A process according to claim 19, wherein the bulk form is in the form of balls, extrudates or powder.

Claim 23 (New): A process according to claim 20, wherein the bulk form is in the form of balls, extrudates or powder.

Claim 24 (New): A process according to claim 11, wherein the bulk form is powder and the process comprises an intermediate step of removing the powder prior to the adsorption step.

Claim 25 (New): A process according to claim 11, wherein water forms during the oxidation step and wherein the process further comprises a step of removing the water before the adsorption step.